

**RECEIVED
CENTRAL FAX CENTER****NOV 20 2006****REMARKS**

Claims 1-32 and 34-43 were pending in the patent application. Claims 2-6, 15-32 and 34-43 have been withdrawn in response to the Requirement for Restriction. Claims 9 and 20; therefore, currently pending are Claims 1-8, 10-19 and 21-22.

Claims 1, 7-10 and 12 have been rejected under 35 USC 102 as being anticipated by Yamada; Claims 1, 7, 9, 11, 12, and 14 have been rejected as anticipated by Beasom; Claims 1, 7, 9, and 12-14 have been rejected as anticipated by Kodama, Claim 1 has been rejected as anticipated by Matsuo; and Claims 7 and 9 have been rejected under 35 USC § 103 as being unpatentable over Matsuo. For the reasons set forth below, Applicants respectfully assert that all of the pending claims, as amended, are patentable over the cited prior art.

The present application teaches and claims a carrier structure on which semiconductor chips can be mounted. The carrier structure has through-vias of constant diameter each having a conductive structure with an effective coefficient of thermal expansion which is less than or closely matched to that of the substrate, and having an effective elastic

YOR920030098US1**-13-**

modulus value which is less than or closely matches that of the substrate (Claim 1). The conductive structure which is the subject of the remaining pending claims, Claims 7-14, is the conductive structure wherein the through-vias comprise a first conductive via material disposed in annular shape along the sidewalls of said through-via, said annular shape having an annular diameter which is said constant diameter and having a core structure comprising a second via material disposed within said annular shape and having a lesser diameter. The claims have been amended to recite that the carrier structure is for mounting semiconductor chips, in contrast to the cited art that teaches chip structure. In addition, the claims have been amended to recite that each through-via is of constant diameter, such that the through-vias have straight sidewalls, unlike the tapered vias of the prior art. Applicants believe that the amendments to the claims clearly distinguish the invention from the cited prior art.

Anticipation under 35 USC 102 is established only when a single prior art reference discloses each and every element of a claimed invention. See: In re Schreiber, 128 F. 3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997); In re Paulsen, 30 F. 3d 1475, 1478-1479, 31 USPQ2d 1671, 1673

YOR920030098US1

-14-

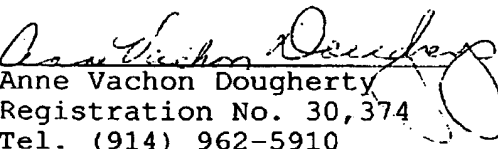
(Fed. Cir. 1994); In re Spada, 911 F. 2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990) and RCA Corp. v. Applied Digital Data Sys., Inc., 730 F. 2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). Since none of the cited prior art teaches a semiconductor carrier for mounting semiconductor chips and having conductive through-vias of constant diameter, it cannot be maintained that cited art anticipates the language of Claim 1, or of Claims 7-14 which depend therefrom.

Based on the foregoing amendments and remarks, Applicants request entry of the amendments, reconsideration of the teachings of the references, withdrawal of the rejections, and issuance of the claims.

Respectfully submitted,

D. Edelstein, et al

By:


Anne Vachon Dougherty
Registration No. 30,374
Tel. (914) 962-5910

YOR920030098US1

-15-